



US009408554B2

(12) **United States Patent**
Gregerson

(10) **Patent No.:** **US 9,408,554 B2**
(45) **Date of Patent:** ***Aug. 9, 2016**

(54) **MOBILE MEDICAL IMAGING SYSTEM AND METHODS**

A61B 6/0478; A61B 6/4405; A61B 6/4411;
A61B 6/4447

See application file for complete search history.

(75) Inventor: **Eugene A. Gregerson**, Bolton, MA (US)

(73) Assignee: **MOBIUS IMAGING, LLC**, Shirley, MA (US)

(56) **References Cited**

U.S. PATENT DOCUMENTS

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 38 days.

This patent is subject to a terminal disclaimer.

4,928,283	A	5/1990	Gordon	
4,935,949	A *	6/1990	Fujita et al.	378/198
4,961,208	A	10/1990	Okada	
4,977,588	A	12/1990	Van der Ende	
5,014,293	A *	5/1991	Boyd et al.	378/197
5,109,397	A *	4/1992	Gordon et al.	378/205
5,448,607	A	9/1995	McKenna	
5,448,608	A	9/1995	Swain	

(Continued)

(21) Appl. No.: **13/359,624**

(22) Filed: **Jan. 27, 2012**

OTHER PUBLICATIONS

(65) **Prior Publication Data**

US 2012/0330087 A1 Dec. 27, 2012

Jupiter system brochure (Nov. 2008) from TRUMPF Medezin Systeme GmbH & Co. KG of Puchheim, Germany.

(Continued)

Related U.S. Application Data

(63) Continuation of application No. 12/576,681, filed on Oct. 9, 2009, now Pat. No. 8,118,488.

(60) Provisional application No. 61/142,494, filed on Jan. 5, 2009.

Primary Examiner — Hoon Song

(74) *Attorney, Agent, or Firm* — The Marbury Law Group, PLLC

(51) **Int. Cl.**

H05G 1/02	(2006.01)
A61B 5/055	(2006.01)
A61B 6/03	(2006.01)
A61B 6/04	(2006.01)
A61B 6/00	(2006.01)

(52) **U.S. Cl.**

CPC **A61B 5/0555** (2013.01); **A61B 6/032** (2013.01); **A61B 6/04** (2013.01); **A61B 6/0478** (2013.01); **A61B 6/4405** (2013.01); **A61B 6/4411** (2013.01); **A61B 6/548** (2013.01); **A61B 6/4447** (2013.01); **A61B 6/508** (2013.01)

(58) **Field of Classification Search**

CPC A61B 5/0555; A61B 6/032; A61B 6/04;

(57)

ABSTRACT

A mobile medical imaging device that allows for multiple support structures, such as a tabletop or a seat, to be attached, and in which the imaging gantry is indexed to the patient by translating up and down the patient axis. In one embodiment, the imaging gantry can translate, rotate and/or tilt with respect to a support base, enabling imaging in multiple orientations, and can also rotate in-line with the support base to facilitate easy transport and/or storage of the device. The imaging device can be used in, for example, x-ray computed tomography (CT) and/or magnetic resonance imaging (MRI) applications.

33 Claims, 16 Drawing Sheets

